Winter \*\*

### Flood Control Project Maintenance Levee Inspections

# **LMA District Cover Sheet**

**Spring 2019 Levee Inspection Results** 

# **Sutter Maintenance Yard Maintenance Area 0016**

Spring

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)				
,	** Non-receipt of Summ Reports may effect o			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated for the overall maintenance within the attached unit of the overall maintenance within the attached unit of the overall maintenance of the overal	I using the same crite nce rating shown abo	ria in the spring and ove is based on opera	in the fall.	ficiencies identified
Comments				

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

## **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles
Unit No. 01 Feather River	Right	4.06

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/4/2019 - 4/4/2019			
DWR Inspector	Sterling York			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# **Levee Inspection Report By Mile - Spring 2019**

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

	D 11 44						
	Rating **	Α	Issue No.		3		
	Issue Type +	Ma	Location *				
Earthen L	evee		GPS La	atitud	le/Longitude		
					End		
Operations & Maintenance		nce		0		0	
Manuals				0		0	
DWR_MA0	016_01_s _ 201	3_3					
	Comn	nent Cod	le				
	Inspecto	or Comm	nent				
SBFCA has turned over levee to MA 16.The O&M manuals are located at the Sutter Maintenance Yard.							
	Operation Manuals DWR_MA0	Earthen Levee  Operations & Maintenar Manuals  DWR_MA0016_01_s _ 201  Comn  Inspector s turned over levee to M	Issue Type + Ma  Earthen Levee  Operations & Maintenance Manuals  DWR_MA0016_01_s _ 2013_3  Comment Coc  Inspector Comments turned over levee to MA 16.Th	Issue Type + Ma Location *  Earthen Levee GPS La Start  Operations & Maintenance Manuals  DWR_MA0016_01_s _ 2013_3	Issue Type + Ma Location *  Earthen Levee GPS Latitud Start  Operations & Maintenance Manuals	Earthen Levee  GPS Latitude/Longitude  Start  End  Operations & Maintenance  Manuals  DWR_MA0016_01_s _ 2013_3  Comment Code  Inspector Comment  s turned over levee to MA 16.The O&M manuals are located	

No Photos

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ма	Location *			
Category	Earthen L	evee	GPS Latitude/Longitude				
Category				Start		End	
Item	Flood Pre	paredness &		0		0	
пеш					٥		0
DWR ID	DWR_MA0	016_01_s _ 201	3_4				
	Comment Code						

No Photos

Inspector Comment
Sutter maintenance yard employees attend the annual Flood Fight class put on by DWR.

	LM Start		Rating **	Α	Issue No.		5	
	LM End		Issue Type +	Ma	Location *			
	Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End		
	Item	Emergency Supplies & Equipment				0		0
						0		0
	DWR ID DWR_MA0016_01_s _ 2013_5							
			Comn	nent Cod	le			

No Photos

Inspec	tor C	omme	nt

Emergency supplies and equipment are stored at the Sutter Maintenance Yard.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

MA0016

#### Flood Control Project Maintenance Levee Inspections

# Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

LM Start	0.01	Rating **	Α	Issue No.		7		
LM End	4.06	Issue Type +	Ma	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Calegory			Start		End			
Item	Vegetatio	getation			31 °	39.310941 °		
пеш			-121.6363	94 °	-121.637634°			
DWR ID	DWR_MA0	016_01_s _ 201	9_7					
Comment Code								
V1 : Contro	V1 : Control annual grass and weeds on the levee slopes and							

easements.

#### Inspector Comment

The annual vegetation is well maintained, Spring 2019.

# Photo 1 of 1 : SP\_2019\_MA0016\_302\_7\_20190409\_00011.jpg



View looking upstream landside at the well maintained vegetation, Spring 2019.

LM Start	0.01	Rating **	Α	Issue No.		8	
LM End	4.06	Issue Type +	Ma	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category		Start		End			
Item	Vegetatio	n		39.2559	31 °	39.310941	э
пеш			-121.6363	94°	-121.637634	э	
DWR ID	DWR_MAG	016_01_s _ 201	9_8				

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment

The annual vegetation is well maintained, Spring 2019.

# Photo 1 of 1 : SP\_2019\_MA0016\_302\_8\_20190409\_00012.jpg



View looking upstream waterside at the well maintained vegetation, Spring 2019.

LM Start	2.85	Rating **	M	Issue No.		14		
LM End	3.08	Issue Type +	En	Location *	LS			
Category Earthen Levee			GPS La	atitud	le/Longitude			
Calegory			Start		End			
Item	Encroach	ments		39.2936	75 °	39.296748	0	
пеш	item		-121.6366	15 °	-121.638192	0		
DWR ID DWR_MA0016_01_s _ 2012_14								
	0.5 15 15 15 15							

## Comment Code

DT: Ditch

#### Inspector Comment

An agricultural ditch is located at the landside slope and toe.

#### Photo 1 of 2: SP\_2019\_MA0016\_302\_14\_20190305\_00001.jpg



View of agricultural ditch at the landside slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

	2.05	Rating **	N 4	Issue No.		44/
LM Start	2.85	Raurig	М	issue ivo.		14 (cont)
LM End	3.08	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		39.2936	75 °	39.296748 °
пеш				-121.6366	15 °	-121.638192 °
DWR ID DWR_MA0016_01_s _ 2012_14						
		Comn	nent Cod	le		
DT : Ditch						
		Inspecto	or Comm	nent		
An agricultural ditch is located at the landside slope and toe.						



View of agricultural ditch.

LM Start	3.39	Rating **	М	Issue No.		15
LM End	3.39	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	39.30121	8 °	39.301218°
пеш				-121.63833	2 °	-121.638332 °
DWR ID	17125					

# Inspector Comment

Comment Code

FS\_ID:54027 DS\_ID:17125 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 05/22/2019 (O. Magana - DWR UCIP)05/22/2017 LS inlet buried. WS access being blocked off by over grown vegetation. Pipe has been selected for internal cleaning and inspection as part of the DMP project. (DWR Sutter Yard - AFreitag)12/01/2016 LS inlet completely buried. (DWR Sutter Yard- AFreitag)05/26/2016 LS inlet was completely buried.06/08/2015 Concrete headwall is still cracked and inlet is buried. It was said to be replaced with the SBFCA project but the project skipped over in this area.12/29/2014 Same as last inspection.05/19/2014 Same as last inspection.11/06/2013 Same as last inspection.05/14/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.12/11/2012 Concrete headwall on LS toe is cracked through middle and pipe is burried in soil. pipe appears corroded. (DWR UCIP - W. Wylie)

FIELD\_STRUCT\_DESC: 1 of 2: 24-inch corrugated metal drainage pipe through the levee, 16.6 feet below the crown. Concrete headwalls on both the waterside (WS) and the landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955, (Station 646+96)]. FS Date: 5/22/2019 3:47:39 PM

#### Photo 1 of 2: UCIP\_SP\_2019\_54027\_65782.jpg



Headwall at LS toe is cracked and the inlet is burried in soil.

# Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

LM Start	3.39	Rating **	М	Issue No.	15 (cont)	
LM End	3.39	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Itom	DWR UC	IP LMA Respo	onsibility	39.3012	18°	39.301218°
item	Item				32 °	-121.638332°
DWR ID 17125						
Comment Code						

## Inspector Comment

FS\_ID:54027 DS\_ID:17125 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 05/22/2019 (O. Magana - DWR UCIP)05/22/2017 LS inlet buried. WS access being blocked off by over grown vegetation. Pipe has been selected for internal cleaning and inspection as part of the DMP project. (DWR Sutter Yard - AFreitag)12/01/2016 LS inlet completely buried. (DWR Sutter Yard- AFreitag)05/26/2016 LS inlet was completely buried.06/08/2015 Concrete headwall is still cracked and inlet is buried. It was said to be replaced with the SBFCA project but the project skipped over in this area.12/29/2014 Same as last inspection.05/19/2014 Same as last inspection.11/06/2013 Same as last inspection.05/14/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.12/11/2012 Concrete headwall on LS toe is cracked through middle and pipe is burried in soil. pipe appears corroded. (DWR UCIP - W. Wylie)

FIELD\_STRUCT\_DESC: 1 of 2: 24-inch corrugated metal drainage pipe through the levee, 16.6 feet below the crown. Concrete headwalls on both the waterside (WS) and the landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955, (Station 646+96)]. FS Date: 5/22/2019 3:47:39 PM

# Photo 2 of 2 : UCIP\_SP\_2019\_54027\_65781.jpg



Headwall on WS toe with flap gates.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

LM Start	3.39	Rating **	М	Issue No.		16
LM End	3.39	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP Field Study			39.3012	18°	39.301218°
пеш					32 °	-121.638332 °
DWR ID	17183					

# Comment Code

#### Inspector Comment

FS\_ID:54028 DS\_ID:17183 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 05/22/2019 (O. Magana - DWR UCIP)05/22/2017 LS inlet is buried. WS access is being blocked off by overgrown vegetation. (DWR Sutter Yard - AFreitag)12/01/2016 LS inlet is completely buried. (DWR Sutter Yard- AFreitag)05/26/2016 LS inlet was completely buried.06/08/2015 Concrete headwall is still cracked and inlet is buried. It was said to be replaced with the SBFCA project but the project skipped over in this area.12/29/2014 Same as last inspection.05/19/2014 Same as last inspection.11/06/2013 Same as last inspection.05/14/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.12/11/2012 Pipe burried on LS toe and should be inspected along with adjacent 24-inch once uncovered. (DWR UCIP - W. Wylie)

FIELD\_STRUCT\_DESC: 2 of 2: 24-inch corrugated metal drainage pipe through the levee, 16.6 feet below the crown. Concrete headwalls at both the waterside (WS) and landside (LS) ends and a flap gate on the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955 (Station 646+96)]. FS Date: 5/22/2019 3:48:28 PM

LM Start	3.39	Rating **	М	Issue No.	16 (cont)
LM End	3.39	Issue Type +	En	Location *	



Pipe should be located on either side of the one visible in this picture.

#### Photo 2 of 2: UCIP SP 2019 54028 65779.jpg



Headwall and flap gate on WS toe.

Location Rating Issue Type LS : Land Side Ma : Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

# Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

LM Start	4.07	Rating **	A/W	Issue No.		17
LM End	4.07	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.31112	27 °	39.311127°
пеш					)6°	-121.637606 °
DWR ID	17123					

# Comment Code

#### Inspector Comment

FS ID:54030 DS\_ID:17123 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 05/22/2019 (O. Magana - DWR UCIP)05/22/2017 Crossing appears to be in good condition. (DWR Sutter Yard -AFreitag)12/01/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)05/26/2016 Crossing appears to be in good condition.06/08/2015 Pipe appears to be in good condition. No noticeable issues to report. Pipe was listed to be replaced with the SBFCA project but the project did not take place in this area.12/29/2014 Same as last inspection.05/19/2014 Same as last inspection.11/06/2013 Same as last inspection.05/14/2013 Slide gate opened allowing water to flow through, debris problem has been cleared and the gates seem to be functioning properly. SBFCA project recommends replacing in accordance with title 23.12/11/2012 Lock missing from concrete well access door-this should be resplaced. Some debris blocking preventing flapgate from completely closing. (DWR UCIP - W. Wylie)

FIELD\_STRUCT\_DESC: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 20.5 feet below the crown. Slide gate in a concrete well on the waterside (WS) slope. Siphon breaker/air vent on the WS shoulder at the concrete well. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955, (Station 683+25)]

FS Date: 5/22/2019 3:50:14 PM





Slide gate, concrete well, siphon breaker/air vent and open channel on WS of levee.

# **Levee Inspection Report By Mile - Spring 2019**

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York

LM Start	4.07	Rating **	A/W	Issue No.		17 (cont)	
LM End	4.07	Issue Type +	Ма	Location *			
Catagony	Category Supplemental		GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UCIP LMA Responsibility		39.3111	27°	39.311127°		
пеш				-121.6376	06 °	-121.637606 °	
DWR ID	17123						

# Comment Code

#### Inspector Comment

FS\_ID:54030 DS\_ID:17123 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 05/22/2019 (O. Magana - DWR UCIP)05/22/2017 Crossing appears to be in good condition. (DWR Sutter Yard -AFreitag)12/01/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)05/26/2016 Crossing appears to be in good condition.06/08/2015 Pipe appears to be in good condition. No noticeable issues to report. Pipe was listed to be replaced with the SBFCA project but the project did not take place in this area.12/29/2014 Same as last inspection.05/19/2014 Same as last inspection.11/06/2013 Same as last inspection.05/14/2013 Slide gate opened allowing water to flow through, debris problem has been cleared and the gates seem to be functioning properly. SBFCA project recommends replacing in accordance with title 23.12/11/2012 Lock missing from concrete well access door-this should be resplaced. Some debris blocking preventing flapgate from completely closing. (DWR UCIP - W. Wylie)

FIELD\_STRUCT\_DESC: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 20.5 feet below the crown. Slide gate in a concrete well on the waterside (WS) slope. Siphon breaker/air vent on the WS shoulder at the concrete well. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955, (Station 683+25)]

FS Date: 5/22/2019 3:50:14 PM

LM Start	4.07	Rating **	A/W	Issue No.	17 (cont)
LM End	4.07	Issue Type +	Ma	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_54030\_65784.jpg



Pumping plant and slide gate on LS accross canal. (no access from levee).

#### Photo 3 of 3: UCIP\_SP\_2019\_54030\_65783.jpg



Cocrete headwall and flap gate on WS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0016**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	04/04/2019 04/04/2019	Sterling York